

Wednesday 3rd March 2004 7:15 for 7:45

Small Lecture Theatre, Department of Plant Sciences,  
Downing Site, Cambridge

## A case study in Winter Wheat Fungicide Trials in the UK 1999-2001

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**Abstract:** In the UK, the approach adopted to cereal variety evaluation trials has undergone steady refinements over the past 25-30 years. However, in the late 1970's and early 1980's farmers began to use commercially available fungicides to control foliar diseases. To complement the majority of trials that remained with no fungicide, a series of trials was introduced (Priestley and Bayles (1982)) to study varietal performance in the absence of foliar disease. The untreated trials (U trials) evaluated variety performance in the presence of natural disease pressures and highlighted any inherent genetic resistance. Trials receiving a full programme of fungicide sprays (T trials) allowed the full biological potential of the variety to be expressed in the absence of foliar diseases. This series of T trials should be considered as a programme of sprays within an experimental setting and not as a regime intended for farm situations. With major changes in the pricing structure applied to UK grain there is currently great interest in assessing varietal performance under reduced fungicide situations as part of a drive towards more sustainable arable enterprises. The aim of this paper is two-fold. Firstly, to apply appropriate statistical tools to gain an understanding, from this particular data set, of variety response to varied fungicide inputs. Secondly, to use this data, with a relatively low number of environments, to assess current methodology for the quantification of potentially useful varieties in terms of niche adaptation and sustainability.

**Speakers:** Haidee has worked within the statistics and data processing team at NIAB for the past six years: organising, processing, analysing and reporting on variety trials from across the UK. Before this she studied at Anglia Polytechnic University. John's 32 years of employment has involved servicing scientific staff at the National Institute of Agricultural Botany (NIAB) headquarters in Cambridge. From 1997 to 2000 John chaired the UPOV Technical Working Party on Computer Programmes and Automation.

**Directions:** The Department of Plant Sciences is located on the Downing site situated between Downing Street and Tennis Court Road (see attached map). Go through the second door you come to in the building immediately on your left as you enter from Tennis Court Road. Once inside the building follow the arrows. Refreshments will be served in the first floor kitchen. It is not possible to park on the Downing site in the evening. The nearest car park is at Lion Yard (see other attached map). Arrivals after 7:45pm can gain admittance by contacting the secretary on 07761769436.

**Provisional Next Meetings:**

5th April - Anthony Edwards (Gonville and Caius) on 'Cambridge Statistics from Venn to Fisher and beyond'.

13th May - Melanie Cooray (Statwood Partnership) on 'Statistical Considerations When Working for a CRO'.

**Supper:** Some members eat regularly in the University Centre before each meeting at **5-30pm**. Feel free to join them.

**Subscriptions:** of 4 pounds are now due for the 2003-2004 session.

**Secretary:** Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 2EF;

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